

Title (en)

PHOTO-DETECTOR AND SPECTROSCOPE USING THE SAME

Title (de)

FOTODETEKTOR UND SPEKTROSKOP DAMIT

Title (fr)

PHOTODETECTEUR ET SPECTROSCOPE ASSOCIE

Publication

EP 1693656 A4 20101208 (EN)

Application

EP 04819369 A 20041124

Priority

- JP 2004017411 W 20041124
- JP 2003400278 A 20031128

Abstract (en)

[origin: EP1693656A1] A photodiode array, having a plurality of photodiodes 12 (n-type channel regions 121), and a light entrance portion 13, formed of an opening that is used to make light to be detected by photodiodes 12 enter, are provided in a substrate 10 of a photodetector 1A having an n-type substrate 101 and a p-type epitaxial layer 102. Furthermore, a carrier capturing portion 60, for capturing carriers generated at a substrate portion near the light entrance portion 13 and removes the captured carriers to the exterior via an electrode 61, is arranged from a layer portion of the epitaxial layer 102 that is positioned between the photodiode array 11 and the light entrance portion 13. A photodetector of a simple arrangement, which, when applied to a spectrometer, enables the positioning precision of components of the spectrometer to be improved, and a spectrometer using this photodetector are thus realized.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 2005052523A1

Designated contracting state (EPC)

CH DE DK FR GB LI

DOCDB simple family (publication)

EP 1693656 A1 20060823; EP 1693656 A4 20101208; EP 1693656 B1 20131106; DK 1693656 T3 20131216; JP 2005164286 A 20050623;
JP 4627402 B2 20110209; US 2008259331 A1 20081023; US 8125636 B2 20120228; WO 2005052523 A1 20050609

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